objection is well taken. If the operation, as Ullmann performs it, stands the test of time, we shall have learned something in abdominal surgery and seen another of the bugaboos of infection disposed of.—*Centralblatt für Chirurgie*, No. 2, 1895.

II. A Contribution to the Technique of Intestinal Suturing. By Dr. LANDERER (Leipzig). The numerous recent modifications of the intestinal suture show the desirability of simplifying the operation. In strangulated gangrenous hernia, as well as in the resection for cancerous disease, the entire result may depend upon the perfection of the anastomosis, whether the operation takes ten minutes or an hour. In the case of feeble patients, a prolonging of the narcosis and the operation for half an hour may be the cause of death.

Of the many modifications of the intestinal suture (Neuber, Senn, Wölfler, Braun, Von Baracz, *et al.*), the button of Murphy seems to attract the greatest interest at the present time.

Although many good results have been reported in America and also in Germany, still, there have been some cases in which the button caused perforation and fatal peritonitis or intestinal obstruction. In the ANNALS OF SURGERY, of February, 1895, Dawbarn reported two cases of death from the use of Murphy's button, once from perforation and once from intestinal obstruction. He has also reported four cases in which the button was not passed along the canal, but was found in the intestine at the autopsy or at a second operation.

The objections to this button are its size and weight, which hinder its easy expulsion and passage along the intestinal canal, and the necessary necrosis of the clamped portion of intestine which renders perforation liable to occur. Another objection is that it is not always at hand and not easily obtained.

Landerer has invented the following method of quickly uniting the two ends of divided intestine without the dangers and objections inherent in this button of Murphy. As yet he has tried it only upon dogs and cadavers.

A cylinder is cut out of a potato or turnip. This cylinder is

perforated by a hole made with a canula or grooved chisel, is bevelled at either end and traversed about its middle by a circular groove. (Fig. 1.) This groove is one centimetre to 1.3 centimetres long, and one-half centimetre to one centimetre deep. It is in shape very like

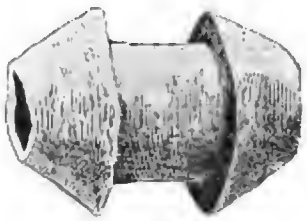

FIG. 1.

the bone cylinders of Neuber. These cylinders are made in various sizes before the operation and disinfected in sublimate solution 1 : 1000.

The two ends of intestine are brought over this cylinder. The

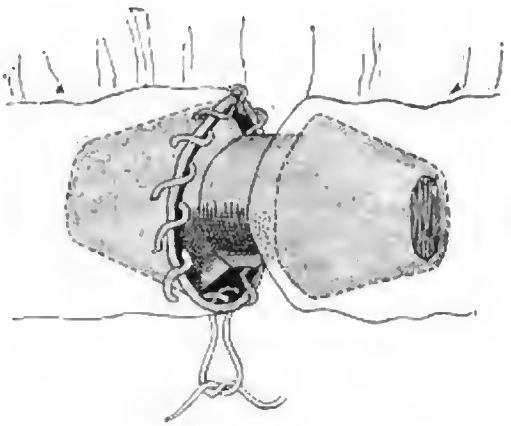

FIG. 2.

intestine is first fastened by a running suture passed through the intestinal wall over and over the edge of the gut. (Fig. 2.) The two ends of the loosely-applied suture must be crossed at the place of tying or a little puckering will result, through which intestinal contents can pass. In Landerer's first two cases a small fæcal abscess

formed at this place. It was shut off and did not interfere with recovery. The suture need not be applied so near the end of the gut as is shown in Fig. 2, but more of the intestinal wall may be included. It may be inserted three to five centimetres from the edge. Landerer begins this running suture at the point opposite the insertion of the mesentery, and allows the threads to cross before tying. If the knot is made on the side towards the mesentery, irregularities are less easily discovered. With the help of this suture—as with the tobacco-pouch suture used with the Murphy button—the intestine is pushed over the cylinder so that it rolls into the groove, and the suture drawn up like a shir-string and tied; and its serous surfaces

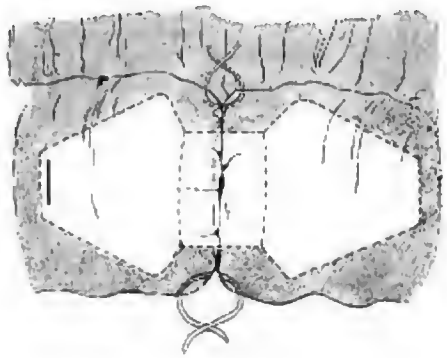

FIG. 3.

come together. In some cases it has sufficed to apply simply a single suture at the mesenteric insertion to prevent the gut from pulling apart. Healing in these cases was perfect. A few interrupted sutures or a running sero-serosa suture may be applied. These sutures are applied very easily because the surfaces are held nicely in position by the underlying cylinder. It suffices to apply simply a serosa suture at the mesenteric insertion and one on the opposite side of the intestine.

The canal through the cylinder should be five to eight millimetres in diameter. In dogs, Landerer used a canal three to four millimetres in diameter. In dogs which were killed on the third or fourth day there was no fæcal accumulation found either above or

below the cylinder, as has been often found in the cases where Murphy's button was employed. The fæcal current evidently circulated freely through the cylinder.

At the third or fourth day the cylinder was found to be just as firm as at the operation, though its ends and lumen had begun to show that it was being digested away. It can be assumed that the vegetable cylinder remains in place five or six days, which is abundant time for strong adhesions to form. After eight or ten days the cylinder could not be found anywhere in the intestinal tract nor in the fæces which had been previously passed. It had been completely digested. At this time only a linear scar remains, and there is nothing like a sign of stenosis to be found.

The animals experimented upon by Landerer were not nursed, but on the following day were given their ordinary food. The operation is more difficult in dogs than in men, because in the dog there is a very strong tonic contracture of the circular muscles of the intestine, which causes the mucous membrane to extrude and makes the operation difficult. But still Landerer has obtained good results, with no other serosa suture than one at the mesenteric insertion. When the mucosa protrudes too much, a circular piece can be cut off.

In the large intestine larger cylinders must be used. From experiments upon the cadaver Landerer finds that the operation is entirely applicable for gastro-enteroanastomosis and for resection of the pylorus. Here the cylinders must be shorter.—*Centralblatt für Chirurgie*, No. 13, 1895.

JAMES P. WARBASSE (Brooklyn).

III.—Excision of Non-Cancerous Strictures of the Rectum through an Incision in the Posterior Vaginal Wall. By M. CAMPENON (Paris). The tendency of surgeons at the present time is to excise strictures of the rectum. An endeavor is always made to preserve, if possible, the external sphincter. This is the aim of the operations devised by Kraske and by Hartmann. The operation of the latter surgeon is not applicable in all cases; and